# A DYNAMIC APPROACH TO BANK CREDIT IN LIGHT OF ECONOMIC DEVELOPMENT

Carlos Alvarez Sierra Postal Address: Jr. Huanuco # 978 Huancayo – Perú Telephone 051-064-9606814 alsimit@hotmail.com

Abel Alvarez Siera Postal Address: Jr. Huanuco # 978 Huancayo – Perú Telephone 051-064-9606814 <u>abelsierra72@hotmail.com</u>

# ABSTRACT

It is really difficult that the managers can make in front of the necessity of investment of their companies appealing so alone to the own funds, that is to say, to the self-financing. The global competitiveness doesn't wait, neither gives truce, it is so they have to appeal to some financing form, either through a bank credit or an emission of holding and values in the stock exchange. The present investigation tries to explain the dynamic behavior between the productive sector and the financial sector, it presents the dynamic form as it is that multiple variables are interrelated, such as the benefits of the companies, the bank deposits, private saving, the interest rate, the retirement of savings, so that through the bank credit they contribute in the economic development of a country like Peru.

# INTRODUCTION

In these last years the governments have had difficulties to brake the effects but devastating of the bank and financial crises about the economy of the different countries. The current composition of the markets and their respective prevalent deregulation in these and the enormous readiness of liquidity in private hands have even limited the concerted action of the national governments.

The last bank crises happened in America have caused a drastic fall in the rate of economic growth, for what has not contributed to the economic development of the region.

Due to all these events happened in these last years and observing the narrow relationship that exists among the bank credit with the other macroeconomic variables, saw each other in the necessity of carrying out the study on the effect that can have the bank credit in the economic development.

The presented investigation work seeks to explain the dynamic behavior between the productive sector and the financial sector.

Without a doubt one of the main concerns that suffer today in day to the small and medium managers, is referred to the difficulty to finance their operations in appropriate form.

Indeed; for many years, independently of cycles and economic plans, the small companies should face the obstacles taken place by the financial system, legal mark, etc.

All these aspects will be been able to analyze, by means of causal diagrams keeping in mind the behavior of the financial system and the productive sector.



#### MODEL 1:

In the first case a scenario is presented without the influence of the external sector.

In this outlined model you can appreciate that the bank credit has to do with the importance of fomenting the employment, this explanation is a lineal relationship, to be able to explain the importance of the bank credit in the economic development, without considering the external sector, a causal analysis is made by sector:

The financial system completes the paper of transferring the private saving, by means of the bank credit toward the companies that it would be given by the investments in our model.



Figure N° 1: Financial System



Figure N° 2 : Productive Sector



The causal relationship of the diagrams you can express: to more bank credits, the investments will spread to be increased, to but investments were generated but employments, the increase of the investments will also spread to redefine the regulatory scheme, the quality of the public administration and the government's decisions that it would be given by the variable (structure change)



As the saving of the private sector is increased there will be bigger bank deposits, the that will be able to translate in increases nouns of the bank credits.

The problems of the bank credit will be been able to be overcome as the best small companies their capitalization, this will diminish the perception of the bank watering, to an increment of the perception of risk, the bank credits will spread to diminish.



One of the important variables that achieves a dynamic effect in the economy of the countries this die for the investments: for our outlined model as much as but investments, it elevated the level of the population's employment; as the employment is increased there will be the population's bigger economic prosperity.

The increase of the investments is also translated in appropriate regulatory scheme, quality of the government's administration public and appropriate decisions that would be given by the variable (structure change), as much as but changes adapted in the government's structure the country will have a better attractiveness for the investments,

it Elevated the competitiveness of the companies and will be able to see a bigger control of the environment.



As much as better it is the state of the environment, the country will have a better attractiveness for the investments, this caused an increase noun in the investments.

In the model outlined one can see the relationship but important of the financial system with the productive system it is given through the bank credit, as much as but credits are granted, the investments spread to be increased; the increments of the benefits of the companies, the same as a conscience of the managers in reinvesting its beneficent ones will spread to increase the reinvestment of the beneficent ones of the companies, all this will be able to elevate the investments.

Just as you it could appreciate in the model 1 (without considering to the external sector), the bank credit, is a very important factor and determinant for the economic growth of the country.

#### MODEL 2:

In the second case of the model presented with a scenario of intervention of the external sector by means of the variable (flow of capital external).

With an intervention of the external sector, the financial and productive system will be affected by the variables of risk of financial crisis and risk of bank crisis. These variables helped us to explain the behavior of the financial system and the productive system better in the event of bigger opening of the economies of the developed sub countries.



Figure N° 3: Financial System



Figure N° 4 : Productive Sector



In the new presented model, the causal relationship of the bank credit in front of the other variables has not varied: to more bank credits, the investments will spread to be increased, to but investments were generated but employments, the increase of the investments will also spread to redefine the legal mark, the quality of the public administration and the government's decisions that it would be given by the variable (structure change)



The intervention of variables of the external sector in our model, with more risk the country will have a smaller attractiveness for the investments, this would influence in smaller flows of capital of the exterior. A bigger bank risk also elevated the exchange rate, what caused a reduction in the benefits of the companies and a devaluation of the national currency.



The devaluation of the national currency, caused bigger bank problems in that will be able to cause an increase of the watering of bank crisis. Just the opposite as much as bigger is the perception of solvency of the banks, the bank problems will spread to diminish; as the banks have bigger briefcase problems the bank problems they were increased.

As much as but changes adapted in the government's structure the country will have a better attractiveness for the flow of external capital, as they are increased the flow of external capital (by means of investment in the stock exchange and we lend) will make that bigger watering of bank crisis takes place.



In this second model the investment has an important relevance as in the model 1, as much as but investments, it elevated the level of the population's employment; as the employment is increased there will be the population's bigger economic prosperity.

The increase of the investments is also translated in appropriate legal mark, quality of the government's administration public and appropriate decisions that would be given by the variable (structure change), as much as but changes adapted in the government's structure the country will have a better attractiveness for the investments, it Elevated the competitiveness of the companies, will be able to see a bigger control of the environment and in a same way the government will intervene in an efficient way to regulate the financial system.



Contrary to the first model the investments are influenced by the variables: bank credits, flow of external capital, interest rate and the reinvestment of benefits of the companies.

In this model one can see the relationship between the financial system and the productive system it is given through the bank credit; as it increases the bank deposits bigger financial placements they will take place, the one that caused bigger investments, a contrary effect would produce the increase of the variable perception of the risk and cost of the credit

As changes adapted in the government's structure the country take place will have a better attractiveness for the investments, this motivated to the flow of external capital the one that will produce a positive effect in the investments. If the inflation expectations are increased in the country the rate of you inform tradesman the one that will contract the investments to ascend. Just the opposite if increases nouns take place in the benefits of the companies and to the conscience of the managers' reinvestment, the reinvestment of benefits tradesman to be increased, all this will influence in increasing the investments.

Just as you it could appreciate in the model 1 and the model 2, the bank credit, is a very important factor and determinant for the economic growth of the country, when the State and the society in general face enormous challenges, the most difficult probably have to do with the promotion of the social development in the fight against the inequality and the poverty that it affects to our impoverished population's great majority.

The respective analysis of the importance of the bank credit in the alone economic development is a sample of what can make the dynamics of systems in the economic problems, this should motivate to develop combined works to be able to obtain results of investigations but profitable.

The government should promote the support to the projects of the small company, which faces difficulties to finance them with bank credits. Another reason that is related with the recovery of the credit that, after a financial crisis and a credit communication, it spreads to limit the financing of the companies of smaller size.

The producers and users of the bank credit face obstacles to consent to the financing, to their scarce capitalization and administrative fragility, to the high perception of the risk on the part of the banking and the high costs of transaction of the credit. However, these sectors are decisive for the employment generation in the economy of the country. Also, they are the new companies of smaller size those that generate the biggest number of employments among the establishments of recent creation.

Deep changes in international scale require consequently deep changes in the internal environment; to make reality the objective of reaching an integral and sustained development that benefits the whole population.

In this sense we see that the mobilization of resources toward the most productive sectors, is necessary to generate, to use and to learn of the technology, because although the production decisions, require of previous planning and in this sense the government should define and to inform clearly on the norms that govern the economic activity. The regulation and the supervision, they are necessary pillars in a solid financial system that can limit the damages caused by the bad administration and to make that the macroeconomic politics is effective.

The bad administration is a key ingredient in the whole bank crisis, only in the case of an economic cataclysm can a good administration overflowed by events turns and still in such circumstances, the existence of good agents is observed and of bad agents, the good agents can limit the damages in a considerable measure.

In this aspect it is important to take in consideration that the foreign investment plays a very important paper in the growth and economic development, in such a way that eliminating the barriers that restrict the entrance of foreign capital to the public sector and private, it is a great achievement since this investment can participate in any proportion of the capital of the qualities.

The relationship that exists between the investment and the growth is broadly wellknown. It is not possible to have positive rates of growth without an appropriate investment level. On the other hand, the requirements of internal saving or (external) they are fundamental to reach investment rates that allow the growth of the economy. It is there that, with the existence of a financial market, the interest rate plays a definitive paper.

# REFERENCES

## Book

# (one author)

- 1. **Bibliography:** ARACIL SANTOJA, Javier, (1983); "Introducción a la Dinámica de Sistemas", Editorial Alianza Textos, Madrid, España.
- 2. **Bibliography:** DRUCKER, Peter F., (1995); "La Innovación y el Empresario Innovador", Editorial Sudamericana, Buenos Aires, Argentina.
- 3. **Bibliography:** FORRESTER, Jay W., (1961); "Dinámica Industrial", Editorial Ateneo, Buenos Aires, Argentina.
- 4. **Bibliography:** MARTINEZ, Eduardo, (1994); "Ciencia Tecnología y Desarrollo", Editorial Nueva Sociedad, Caracas, Venezuela, UNESCO.
- 5. **Bibliography:** RICHARDSON, George P., (1998); "Feedback Thought in Social Science and Systems Theory", Philadelphia, PA: University of Pennsylvania Press.
- 6. **Bibliography:** RACZYNSKI. Stanislaw, (1993);"Simulación por Computadora"; Editorial Limusa, México.
- 7. **Bibliography:** RODRIGUEZ ULLOA, Ricardo, (1994); "Los Sistemas Blandos y los Sistemas de Información", Universidad del Pacifico (Biblioteca Universitaria), Lima.
- 8. **Bibliography:** RODRIGUEZ DELGADO, Rafael, (1994); "Teoría de Sistemas y Gestión de las Organizaciones", Instituto Andino de Sistemas, Lima.
- 9. **Bibliography:** SENGE, Peter M., (1993); "La Quinta Disciplina", Editorial Juan Granica S.A., Barcelona.

## Book

# (two to three authors)

- **1. Bibliography:** ANDERSON, David y ROBERTS, Nancy, (1983); "Introduction to Computer Simulation", Addison Wesley Publishing Company.
- **2. Bibliography:** SACHS, Jffrey D. y LARRAIN B., Felipe, (1994), "Macroeconomía en la Economía Global", Editorial Prentice-Hall Hispanoamericana, S.A, México.